

Shears, Beverly

From: Devi, Sarvamangala
Sent: Friday, January 03, 2003 12:54 PM
To: Shears, Beverly
Subject: 09/801,784

• Hello Beverly:

- Would you please perform a sequence and an interference search for SEQ ID NO: 1 and
- SEQ ID NO: 36 in application SN 09/801,784?

Thank you.

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AU 1645
CM1-7E15

Point of Contact
Beverly Shears
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New Seq. Listing

09/801784

FILE 'REGISTRY' ENTERED AT 11:08:53 ON 06 JAN 2003

L1 4 S PSAVALTYSP/SQSP

L1 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 268205-31-8 REGISTRY

CN Glycine, L-cysteinyl-L-valyl-L-.alpha.-glutamyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-valyl-L-threonyl-L-alanyl-L-seryl-L-valyl-L-.alpha.-aspartyl-L-prolyl-L-threonyl-L-isoleucyl-L-.alpha.-aspartyl-L-leucyl-L-leucyl-L-glutaminyl-L-alanyl-L-.alpha.-aspartylglycyl-L-seryl-L-alanyl-L-leucyl-L-prolyl-L-seryl-L-alanyl-L-valyl-L-alanyl-L-leucyl-L-threonyl-L-tyrosyl-L-seryl-L-prolyl-L-alanyl- (9CI) (CA INDEX NAME)

CI MAN

SQL 38

SEQ 1 CVEKNITVTA SVDPTIDLLQ ADGSALPSAV ALTYSPPAG

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HITS AT: 27-36

REFERENCE 1: 132:333378

L1 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 203004-45-9 REGISTRY

CN L-Proline, L-prolyl-L-seryl-L-alanyl-L-valyl-L-alanyl-L-leucyl-L-threonyl-L-tyrosyl-L-seryl- (9CI) (CA INDEX NAME)

SQL 10

SEQ 1 PSAVALTYSP

=====

HITS AT: 1-10

REFERENCE 1: 128:166357

L1 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 186003-63-4 REGISTRY

CN L-Alanine, L-cysteinyl-L-valyl-L-.alpha.-glutamyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-valyl-L-threonyl-L-alanyl-L-seryl-L-valyl-L-.alpha.-aspartyl-L-prolyl-L-threonyl-L-isoleucyl-L-.alpha.-aspartyl-L-leucyl-L-leucyl-L-glutaminyl-L-alanyl-L-.alpha.-aspartylglycyl-L-seryl-L-alanyl-L-leucyl-L-prolyl-L-seryl-L-alanyl-L-valyl-L-alanyl-L-leucyl-L-threonyl-L-tyrosyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

CI MAN

SQL 37

SEQ 1 CVEKNITVTA SVDPTIDLLQ ADGSALPSAV ALTYSPPA

=====

HITS AT: 27-36

REFERENCE 1: 127:148145

REFERENCE 2: 126:103107

L1 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS

RN 186003-62-3 REGISTRY

CN L-Alanine, L-valyl-L-.alpha.-glutamyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-threonyl-L-valyl-L-threonyl-L-alanyl-L-seryl-L-valyl-L-.alpha.-aspartyl-L-prolyl-L-threonyl-L-isoleucyl-L-.alpha.-aspartyl-

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L-leucyl-L-leucyl-L-glutaminy-L-alanyl-L-.alpha.-aspartylglycyl-L-seryl-L-alanyl-L-leucyl-L-prolyl-L-seryl-L-alanyl-L-valyl-L-alanyl-L-leucyl-L-threonyl-L-tyrosyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

CI MAN
SQL 36

SEQ 1 VEKNITVTAS VDPTIDLLQA DGSALPSAVA LTYS PA
=====

HITS AT: 26-35

REFERENCE 1: 128:166363

REFERENCE 2: 128:166357

REFERENCE 3: 126:103107

FILE 'HCAPLUS' ENTERED AT 11:11:04 ON 06 JAN 2003

L2 5 S L1

L2 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:314569 HCAPLUS

DOCUMENT NUMBER: 132:333378

TITLE: Method for preparing solid phase conjugate vaccines

INVENTOR(S): Lees, Andrew

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000025812	A2	20000511	WO 1999-US25425	19991029
WO 2000025812	A3	20000914		
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1124576	A2	20010822	EP 1999-971326	19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002528516	T2	20020903	JP 2000-579251	19991029
PRIORITY APPLN. INFO.:				
				US 1998-106090P P 19981029
				WO 1999-US25425 W 19991029

AB A method of prepg. conjugate vaccines by adsorbing a protein to a solid phase adjuvant, and covalently linking a carbohydrate to the adsorbed protein. Alternatively, the carbohydrate is first adsorbed to the solid phase adjuvant, then the protein is covalently linked to the carbohydrate. The carbohydrate may be chem. activated. Unconjugated protein may be present.

IT 268205-31-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. solid phase conjugate vaccines)

L2 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:112385 HCAPLUS

Searcher : Shears 308-4994

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DOCUMENT NUMBER: 128:166363
TITLE: Monoclonal antibody which agglutinates
Escherichia coli having the CS4-CFA/I family
protein
INVENTOR(S): Cassels, Frederick; Lees, Andrew; Schuman,
Richard
PATENT ASSIGNEE(S): United States Dept. of the Army, USA; Virion
Systems Inc.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805687	A1	19980212	WO 1997-US13477	19970801
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 918796	A1	19990602	EP 1997-938077	19970801
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000516805	T2	20001219	JP 1998-508058	19970801
PRIORITY APPLN. INFO.:			US 1996-23075P	P 19960802
			WO 1997-US13477	W 19970801

AB A monoclonal antibody to a consensus peptide of the formula:
VEKNITVTASVDPTIDLLQADGSALPSAVALTYSPA. The monoclonal antibody of
the invention binds exclusively to the sequence SAVALTYS and has use
as a diagnostic and for prophylaxis against illness arising from
enterotoxigenic E. coli which produces CS4-CFA/I family of proteins
and for treatment of disease arising therefrom.

IT **186003-62-3**

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(monoclonal antibody which agglutinates Escherichia coli having
the CS4-CFA/I family protein)

L2 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:112247 HCAPLUS
DOCUMENT NUMBER: 128:166357
TITLE: Peptides responsive to antibodies against a
consensus peptide of the CS4-CFA/I family
proteins
INVENTOR(S): Cassels, Frederick; Loomis-Price, Lawrance
PATENT ASSIGNEE(S): United States Dept. of the Army, USA
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805348	A1	19980212	WO 1997-US13476	19970801
W: CA, JP				

Searcher : Shears 308-4994

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RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE

EP 959895 A1 19991201 EP 1997-936322 19970801

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, FI

JP 2000516584 T2 20001212 JP 1998-508057 19970801

US 2001014668 A1 20010816 US 2001-801784 20010309

PRIORITY APPLN. INFO.:

US 1996-23076P P 19960802

US 1996-23145P P 19960805

US 1997-905140 B1 19970801

WO 1997-US13476 W 19970801

AB This invention relates to amino acid sequences from within a consensus peptide of the formula: VEKNITVTASVDPTIDLLQADGSALPSAVALTYS PA. Eight mer peptides from within the consensus peptide were tested against an antibody raised to the consensus peptide. Studies relating to antibody raised to denatured proteins from the natural organisms producing the family of proteins were also useful and showed particular value of some sequences. A sequence of the formula ASVDPTIDLLQA was identified thereby. An enlarge sequences of the formula TVTASVDPTIDLLQAD is also esp. interesting as are intermediate sequences such as sequences VTASVDPTIDLLQAD, TASVDPTIDLLQAD, and TASVDPTIDLLQA as being binding sites for antibodies raised to the denatured proteins. Peptides of the CS4-CFA/I family proteins is useful in providing needed vaccines specific against this class of enterotoxigenic or diarrheagenic Escherichia coli that pose great risk to travelers.

IT 186003-62-3 203004-45-9

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vaccine peptides responsive to antibodies against a consensus peptide of the CS4-CFA/I family proteins of enterotoxigenic diarrheagenic Escherichia coli)

L2 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:459893 HCAPLUS

DOCUMENT NUMBER: 127:148145

TITLE: Antibody to N-terminal consensus peptide is cross-reactive with all six members of the enterotoxigenic E. coli CFA/I family

AUTHOR(S): Cassels, F. J.; Lees, A.; Hansen, B. D.; Barringer, J. D.; Nelson, B. L.; Ryu, H.

CORPORATE SOURCE: Department of Gastroenterology, Walter Reed Army Institute of Research, Washington, DC, 20307, USA

SOURCE: Cytokines, Cholera, and the Gut, [Papers from the Joint Meeting of the United States-Japan Cooperative Medical Sciences Program Panels on Malnutrition and Cholera], Kiawah Island, S. C., Nov. 30-Dec. 3, 1995 (1997), Meeting Date 1995, 275-279. Editor(s): Keusch, Gerald T.; Kawakami, Masanobu. IOS Press: Amsterdam, Neth. CODEN: 64SIAE

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The CFA/I family of enterotoxigenic Escherichia coli (ETEC) colonization factors (CF) consists of CFA/I, CS1, CS2, CS4, CS17, and PCF O166. They have been grouped as a family due to protein sequence homol. as well as immunol. cross-reactivity. In this

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study, addnl. protein sequence of CS2, CS4, CS17, and PCF 0166 was obtained. From this sequence a consensus was derived, a thirty-six amino acid peptide corresponding to this consensus synthesized, the peptide conjugated to a carrier protein, and rabbits immunized. Sera tested pos. in an immunoblot (Western) assay against the peptide as well as against each of the members of the CFA/I family. The sera also agglutinated ETEC strains bearing CS1, CS2, and CFA/I in a slide agglutination test. These data demonstrate that a peptide derived from the consensus of the N-terminus of the CFA/I family is immunogenic and cross-reactive to each member of the family. It is hoped that these and addnl. studies may lead to a cross-protective vaccine to ETEC strains bearing these CF, as well as to a broadly reactive reagent useful in CF detection.

IT 186003-63-4

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cross reactivity of antibody to a consensus sequence peptide
from the enterotoxigenic Escherichia coli CFA/I family)

L2 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:101598 HCAPLUS

DOCUMENT NUMBER: 126:103107

TITLE: Methods of raising antibodies against
Escherichia coli of the family CS4-CFA/1

INVENTOR(S): Cassels, Frederick; Anderson, Jeffrey; Carter,
John Mark

PATENT ASSIGNEE(S): Department of the Army, US Government, USA

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9638171	A1	19961205	WO 1996-US8730	19960603
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5914114	A	19990622	US 1995-460617	19950602
CA 2223013	AA	19961205	CA 1996-2223013	19960603
EP 831900	A1	19980401	EP 1996-918041	19960603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1995-460617 19950602
WO 1996-US8730 19960603

A consensus peptide of 36 amino acids has been designed which acts as an immunogen raising antibodies against the proteins of all members of the E. coli family CS4-CFA/1. While the N-terminus of members of this family of organisms shows a high degree of identity, the remainder of the sequence of the proteins shows much less homol. across the strains. The region of the protein represented in the subunit encompasses known linear B- and T-cell epitopes of CFA/I. The consensus peptide has a high level of homol. to strains bearing six different colonization factors. The consensus peptide is of the formula: VEKNITVTASVDPTIDLLQADGSALPSAVALTYSPA. An alternative peptide, identified as consensus peptide 2 is of the formula: VEKNITVTASVDPTIDLLQADGSALPASVALTYSPA.

Searcher : Shears 308-4994

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IT 186003-62-3 186003-63-4

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; peptide sequence for raising antibodies against Escherichia coli of the family CS4-CFA/1)

FILE 'HOME' ENTERED AT 11:11:17 ON 06 JAN 2003